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EXAMINER

TSUI, WILSON W

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Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/651,211	<b>Applicant(s)</b> PYHALAMMI ET AL.	
	<b>Examiner</b> Wilson Tsui	<b>Art Unit</b> 2178	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 29 August 2003.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-53 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-53 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>See Attached</u> . | 6) <input type="checkbox"/> Other: _____  |

Information Disclosure Statements: 20031031, 20040824, 20041007, 20060113, and 20060323

### DETAILED ACTION

1. This action is in response to the application filed on: 8/29/2003, and IDS filed on: 10/31/2003, IDS filed on: 08/24/2004, IDS filed on: 10/07/2004, IDS filed on: 01/13/2006, and IDS filed on: 03/23/2006.

2. Claims 1-53 are pending. Claims 1, 14, 38, 48, and 53 are independent claims.

### *Claim Objections*

3. Claims 1, 38, and 53 are objected to because of the following informalities:

With regards to claim 1, the claim limitation "such that the image files may subsequently be searched based upon the metadata" seems to be optionally recited, and does not particularly point out whether or not the image files will be searched based upon metadata. Rather, the limitation seems to suggest an "intent of use", and the applicant is reminded that optionally recited or intended use limitations are not required to be taught by the Office, see MPEP § 2106 Section II(C)

With regards to claim 38, the claim limitation "such that the image files may subsequently be searched based upon the metadata" seems to be optionally recited, and does not particularly point out whether or not the image files will be searched based upon metadata. Rather, the limitation seems to suggest an "intent of use", and the applicant is reminded that optionally recited or intended use limitations are not required to be taught by the Office, see MPEP § 2106 Section II(C)

With regards to claim 53, the claim limitation "such that the image files may subsequently be searched based upon the metadata" seems to be optionally recited, and does not particularly point out whether or not the image files will be searched based

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upon metadata. Rather, the limitation seems to suggest an "intent of use", and the applicant is reminded that optionally recited or intended use limitations are not required to be taught by the Office, see MPEP § 2106 Section II(C)

Appropriate correction is required.

***Claim Rejections - 35 USC § 101***

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

4. Claims 48-52 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

With regards to claim 48, it is unclear whether the claimed "machine-readable medium" is a "computer readable medium", thus, the claim appears to be functional descriptive material or "computer program per se". Since the computer program is not embodied on a computer readable medium, the claim is not statutory. See MPEP 2106:

Data structures not claimed as embodied in computer-readable media are descriptive material *per se* and are not statutory because they are not capable of causing functional change in the computer. See, e.g., *Warmerdam*, 33 F.3d at 1361, 31 USPQ2d at 1760 (claim to a data structure *per se* held non statutory). Such claimed data structures do not define any structural and functional interrelationships between the data structure and other claimed aspects of the invention, which permit the data structure's functionality to be realized. In contrast, a claimed computer-readable medium encoded with a data structure defines structural and functional interrelationships between the data structure and the computer software and hardware components which permit the data structure's functionality to be realized, and thus statutory.

With regards to claims 49-52, since the claims depend directly or indirectly upon the rejected claim 48, and are rejected under similar rationale.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1-9, 13, 14, 38-43, and 47 are rejected under 35 U.S.C. 102(b) as being anticipated by Wilcock et al (US Application: US 2001/0015756 A1, published: Aug. 23, 2001, filed: Feb. 20, 2001).

With regards to claim 1, Wilcock et al teaches a method for storing electronic image file data, comprising:

- *Generating images with an imaging device having wireless communication capability, each image being stored as an image file: whereas, a digital camera is used to generate images, which are stored as image files, such as the one shown by reference number 4, in Fig 3. Also, the portable/mobile imaging device is wireless as explained in paragraph 0158 and Fig 9 (whereas a digital camera has GSM capability).*
- *Assigning metadata to each image file contemporaneously with generation of each image, the metadata categorizing each image according to at least two schemes (Fig 3, paragraph 0038: whereas, metadata includes a date scheme and a location scheme.)*
- *Wirelessly transmitting the image files and assigned metadata from the imaging device for storage on a second device such that the image files may*

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*subsequently be searched based upon the metadata* (paragraph 0038, and paragraph 0158: whereas, the mobile image device has wireless capability, and transmits the image files with metadata to a storage server/computer)

With regards to claim 2, which depends on claim 1, Wilcock et al teaches: *wherein wirelessly transmitting the image files and assigned metadata comprises transmitting the image files and assigned metadata via a short range wireless connection* (paragraphs 0038, and 0158: whereas, a short range radio system, can be used.)

With regards to claim 3, which depends on claim 1, Wilcock et al teaches: *wherein, the imaging device is a wireless mobile device, the second device is remotely located from the imaging device, and wirelessly transmitting the image files and assigned metadata comprises transmitting the image files and assigned metadata via a wireless communication network* (whereas, as shown in Fig 3, a second device such as a storage computer/server is remote from a digital device. The imaging device also wirelessly transmits the image files and assigned metadata via a wireless network, as similarly explained in claim 1 and paragraphs 0038 and 0158).

With regards to claim 4, which depends on claim 1, Wilcock et al teaches *wherein at least one of the schemes is date of image creation*, as similarly explained in the rejection for claim 1, and is rejected under the same rationale.

With regards to claim 5, which depends on claim 1, Wilcock et al teaches *wherein at least one of the schemes is one or more subjects shown in an image* (paragraphs 0055, and 0056: whereas, a first subject comprises description metadata being shown in the

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image, and a second subject comprises semantic location metadata being shown in the image).

With regards to claim 6, which depends on claim 1, Wilcock et al teaches *wherein at least one of the schemes is location where an image is created*, as similarly explained in the rejection for claim 1, and is rejected under the same rationale.

With regards to claim 7, which depends on claim 1, Wilcock et al teaches *wherein one of the schemes is date of image creation* (as similarly explained in the rejection for claim 1, and is rejected under the same rationale) *and another of the schemes is multiple subjects shown in an image* (as similarly explained in the rejection for claim 5, and is rejected under the same rationale).

With regards to claim 8, which depends on claim 7, Wilcock et al teaches *wherein another of the schemes is location where an image is created*, as similarly explained in the rejection for claim 1, and is rejected under the same rationale.

With regards to claim 9, which depends on claim 7, Wilcock et al teaches further comprising: *receiving a designation of at least one image as personal and at least one image as shared, wherein the image file for the at least one personal image is only accessible with a password and the image file for the at least one shared image is accessible without the password* (paragraph 0096: whereas a user's photo's can be optionally password protected).

With regards to claim 13, which depends on claim 1, Wilcock et al teaches *wherein at least one of the schemes is location where an image is created* (as similarly explained in the rejection for claim 1, and is rejected under the same rationale), *wherein the*



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*imaging device is a wireless mobile device operating in a wireless communication network (as similarly explained in the rejection for claim 1, and is rejected under the same rationale), and wherein the assigning metadata step further comprises assigning location information based upon data provided by a base station for the wireless network (paragraph 0038, and Fig. 11 and Fig. 12: whereas, a base station is used to retrieve location data for metadata assignment).*

With regards to claim 14, Wilcock et al teaches a server for storing image data, comprising:

- *A memory (paragraph 0158: whereas a server is used to store images and metadata)*
- *A communications interface coupled to a wireless communication network (paragraph 00158: whereas, information is communicated through wireless GSM network)*
- *A processor configured to perform steps comprising:*
- *Storing, in the memory, images transmitted through the wireless communication network to the server (paragraph 0158: whereas, the server is used to store images and metadata), each image having associated metadata categorizing said image according to at least two schemes, wherein said at least two schemes include at least one of an image date, an image location (paragraph 0038: whereas, a date schema, and a location schema is implemented, such that they are stored in external storage, such as a server (paragraph 0158)), and the images are stored in a database at the memory, the database including at least*

*one virtual folder corresponding to each of the at least two metadata schemes*

(Fig 3, paragraphs 0038, 0052, and 0053: whereas, when the images are stored in a database in memory, they include at least one virtual folder corresponding to a collective date, and location schema).

With regards to claim 38, for a wireless mobile device, performing a method similar to the method of claim 1, is rejected under similar rationale.

With regards to claim 39, which depends on claim 38, for a wireless mobile device, performing a method similar to the method of claim 1, is rejected under similar rationale.

With regards to claim 40, which depends on claim 38, for a wireless mobile device, performing a method similar to the method of claim 5, is rejected under similar rationale.

With regards to claim 41, which depends on claim 38, for a wireless mobile device, performing a method similar to the method of claim 8, is rejected under similar rationale.

With regards to claim 42, which depends on claim 38, for a wireless mobile device, performing a method similar to the method of claim 7, is rejected under similar rationale.

With regards to claim 43, which depends on claim 42, for a wireless mobile device, performing a method similar to the method of claim 1, is rejected under similar rationale.

With regards to claim 47, which depends on claim 38, for a wireless mobile device, performing a method similar to the method of claim 3, is rejected under similar rationale.

*Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

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invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 10-12, and 44-46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wilcock et al (US Application: US 2001/0015756 A1, published: Aug. 23, 2001, filed: Feb. 20, 2001) in further view of Stubler et al (US Application: US 2002/0188602 A1, published: Dec. 12, 2002, filed: May. 7, 2001).

With regards to claim 10, which depends on claim 1, Wilcock et al teaches *wherein at least one of the schemes is one or more subjects shown in an image, and wherein the assigning metadata*, as similarly explained in the rejection for claim 5, and is rejected under the same rationale). Additionally, Wilcock et al teaches the mobile/camera device can run PC related applications, including OS/application software (paragraph 0157, and 158). However Wilcock et al does not expressly teach the assigning metadata step *further comprises receiving a response to a prompt from the imaging device to accept or modify a suggested subject for an image*.

Stubler et al teaches the assigning metadata step *further comprises receiving a response to a prompt from the imaging device to accept or modify a suggested subject for an image* (Figure 3, reference number 208: whereas an interactive verification is implemented, in order to prompt about a suggested/detected subject for an image) from a computing device/PC. The prompt could be based upon a subject suggestion based on calendar data (calendar data inherently searched by a program) such as date proximity (paragraphs 0028-0031)

It would have been obvious to one of the ordinary skill in the art at the time of the invention to have modified Wilcock et al's mobile/camera device, such that it would

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further include the subject detection and prompting and detecting a subject that is taught by Stubler et al's computing device. The combination of Wilcock et al and Stubler et al would have allowed Wilcock et al to have "automatically selected one or more stored images having metadata similar to the acquired image ... and ... generating one or more captions or labels for the acquired image" (Stubler et al, paragraph 0009).

With regards to claim 11, which depends on claim 10, Wilcock et al and Stubler et al teaches *wherein the imaging device is a wireless mobile device capable of executing multiple application programs, and wherein the wireless mobile device generates the prompt based upon data in another application program being executed by the device*, as similarly explained in the rejection for claim 10, and is rejected under the same rationale.

With regards to claim 12, which depends on claim 11, Wilcock et al and Stubler et al teaches *wherein the other application program is a calendar program*, as similarly explained in the rejection for claim 10, and is rejected under the same rationale.

With regards to claim 44, which depends on claim 38, for a wireless mobile device performing a method similar to the method of claim 10, is rejected under similar rationale.

With regards to claim 45, which depends on claim 44, for a wireless mobile device performing a method similar to the method of claim 11, is rejected under similar rationale.

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With regards to claim 46, which depends on claim 45, for a wireless mobile device performing a method similar to the method of claim 12, is rejected under similar rationale.

7. Claims 15-23, 25-27, 29-32, 34-37, and 48-52 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wilcock et al (US Application: US 2001/0015756 A1, published: Aug. 23, 2001, filed: Feb. 20, 2001) in further view of Rothmuller et al (US Application: US 2003/0033296 A1, published: Feb. 13, 2003, filed: Jul. 17, 2002)

With regards to claim 15, which depends on claim 14, Wilcock et al teaches *wherein at least one of the schemes comprises image date* (as similarly explained in the rejection for claim 14, and is rejected under the same rationale), *and wherein the processor is further configured to perform steps comprising: providing a user interface to select at least one date, and displaying information regarding images corresponding to the selected date* (paragraph 0088-0094: whereas a user uses a filter control in a user interface to specify images corresponding to a specific date). However, Wilcock et al does not expressly teach providing a user interface to select at least one date *component, comprising a year, a month, or a day.*

Rothmuller et al teaches providing a user interface to *select at least one date-scheme component comprising a year, a month or a day*, and displaying information about the images (Fig 1, paragraph 0030: whereas, a user specifies in the search criteria a lower bound and upper bound comprising a specific year, month, and day by means of a time line, and the images are displayed as thumbnails in a user interface).

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It would have been obvious to one of the ordinary skill in the art at the time of the invention to have modified Wilcock et al's scheme filtration/selection system, to have further included specifying specific date-scheme criteria, including year, month, and day as explained by Rothmuller et al. The combination of Wilcock et al and Rothmuller et al would have allowed Wilcock et al to have "selected, sorted, organized, and found objects based on their tagged metadata content" (Rothmuller et al, paragraph 0004).

With regards to claim 16, which depends on claim 14, Wilcock et al and Rothmuller et al teaches *wherein information regarding images comprises thumbnail images of the images*, as similarly explained in the rejection for claim 15, and is rejected under the same rationale.

With regards to claim 17, which depends on claim 15, Wilcock et al and Rothmuller et al teach *the processor is further configured to perform steps comprising: providing a user interface to select a year and displaying, as part of the user interface* (whereas selecting a date-scheme component (such as a year), and displaying image data, as similarly explained/taught by Rothmuller et al in the rejection for claim 15). However, the combination of Wilcock et al and Rothmuller et al, that was explained in the rejection for claim 15, does not expressly explain the teachings for the displaying to include *displaying as part of the user interface to select a year, an indication of the years for which there are stored images having metadata corresponding to an indicated year*. Yet, Rothmuller et al further teaches the displaying to include *displaying as part of the user interface to select a year, an indication of the years for which there are stored*

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*images having metadata corresponding to an indicated year (as shown by histograms within the timeline of Figure 1).*

It would have been obvious to one of the ordinary skill in the art at the time of the invention to have the combination of Wilcock et al and Rothmuller et al as discussed in the rejection for claim 15, to have further included the teachings to *displaying as part of the user interface to select a year, an indication of the years for which there are stored images having metadata corresponding to an indicated year*, as also taught by Rothmuller et al. The combination of Wilcock et al and Rothmuller et al would have allowed Wilcock et al to have showed "*the distribution of the objects stored in the database [such that they can] be displayed as a histogram along a time line*"

(Rothmuller et al, paragraph 0008)

.With regards to claim 18, which depends on claim 17, Wilcock et al and Rothmuller et al teach wherein the processor is further configured to perform steps comprising: selecting a date component (such as a year) and displaying upon selection of a year (as explained in the rejection for claim 17). However, the combination of Wilcock et al and Rothmuller et al as explained in the rejection for claim 17 does not expressly explain, *an indication of the months of the selected year for which there are stored images having metadata corresponding to an indicated month.*

Yet, Rothmuller et al further teaches the displaying to include *upon selection of a year, an indication of the months of the selected year for which there are stored images having metadata corresponding to an indicated month* (as shown by the histograms

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within the timeline of Figure 1, the months for which there are stored images are shown).

It would have been obvious to one of the ordinary skill in the art at the time of the invention to have the combination of Wilcock et al and Rothmuller et al as discussed in the rejection for claim 17, to have further included the teachings to include *upon selection of a year, an indication of the months of the selected year for which there are stored images having metadata corresponding to an indicated month*, as also taught by Rothmuller et al. The combination of Wilcock et al and Rothmuller et al would have allowed Wilcock et al to have showed "*the distribution of the objects stored in the database [such that they can] be displayed as a histogram along a time line*"

(Rothmuller et al, paragraph 0008)

With regards to claim 19, which depends on claim 18, the combination of Wilcock et al and Rothmuller et al teach *displaying, upon selection*, as similarly explained in the rejection for claim 18. However, the combination of Wilcock et al and Rothmuller et al as explained in the rejection for claim 18, does not expressly teach *upon selection of a month, an indication of the days of the selected month for which there are stored images having metadata corresponding to an indicated day*.

Yet, Rothmuller et al further teaches the selecting to further include *upon selection of a month, an indication of the days of the selected month for which there are stored images having metadata corresponding to an indicated day* (Fig 4: whereas the days of the selected month are shown and available for selection).



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It would have been obvious to one of the ordinary skill in the art at the time of the invention to have modified the combination of Wilcock et al and Rothmuller et al, to further include upon selection of a month, an indication of the days of the selected month for which there are stored images having metadata corresponding to an indicated day, as also taught by Rothmuller et al. The combination of Wilcock et al and Rothmuller et al, would have allowed Wilcock et al to have further included a "representation in a view such that the days of the calendar indicate the number of objects having metadata associated with a given day of the week in a given week of the month" (Rothmuller et al, paragraph 0009)

With regards to claim 20, which depends on claim 19, Wilcock et al and Rothmuller et al teach displaying, upon selection of a month, an indication of the days of the selected month for which there are stored images having metadata corresponding to an indicated day, as similarly explained in the rejection for claim 19, and is rejected under the same rationale). However, the combination of Wilcock et al, and Rothmuller that was explained in the rejection for claim 19, does not expressly teach the selection of a date, includes a selection of a date in the image area of a user interface.

Yet, Rothmuller et al further teaches the selection to further include includes a selection of a date in the image area of a user interface, information regarding images having metadata corresponding to the selected day (as indicated by reference number 110 of Fig. 1, a selection for a date to restrict viewing of images having metadata corresponding to the selected date).

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It would have been obvious to one of the ordinary skill in the art at the time of the invention to have modified the combination of Wilcock et al and Rothmuller et al, to further include the selection of a date in the image area, as also explained by Rothmuller et al. The combination of Wilcock et al, and Rothmuller et al would have allowed Wilcock et al to have "found particular photos ..." without having to know the hierarchical / directory based file structure for which the images have been stored (Rothmuller et al, paragraph 0003).

With regards to claim 21, which depends on claim 15, Wilcock et al and Rothmuller et al teaches:

- *Displaying an indication of years for which there are stored images having metadata corresponding to an indicated year, as similarly explained in the rejection for claim 17, and is rejected under the same rationale.*
- *Displaying an indication of months for which there are stored images having metadata corresponding to an indicated month, as similarly explained in the rejection for claim 18, and is rejected under the same rationale.*
- *Displaying an indication of days for which there are stored images having metadata corresponding to an indicated day, as explained in the rejection for claim 19, and is rejected under the same rationale.*

Additionally Rothmuller teaches *providing a user interface*, as similarly explained in the rejection for *selecting years, months, and days*, as explained in the rejection for claim 15. Rothmuller et al further teaches the user interface and selection to further include *simultaneously displaying years, months and days for sequential user selection* (Figure

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1: whereas, the years, months, are simultaneously displayed sequentially via the time line (reference number 250), and the days are displayed as well in the image area).

With regards to claim 22, which depends on claim 21, Wilcock et al and Rothmuller et al teaches:

- *Designating, upon selection of a year or month prior to selection of a day, a day of the selected year or month in which there are available images, as similarly explained in the rejection for claim 19 (since the calendar shows the particular days in which there are available images), and is rejected under similar rationale.*

Rothmuller et al teaches *displaying, prior to selection of a day*, as similarly explained in the rejection for claim 19, and is rejected under similar rationale. Rothmuller et al additionally teaches the displaying prior to selection of a day includes *information regarding images having metadata corresponding to the designated day* (Fig 1, reference number 100: whereas, no particular day is selected, and images that have matching metadata are displayed for each day.)

With regards to claim 23, Wilcock et al and Rothmuller et al teaches: a method for choosing a day of the selected month in which there are available images, as similarly explained in the rejection for claim 19, and is rejected under the same rationale.

However, Wilcock et al and Rothmuller et al do not expressly teach randomly selecting a day.

Yet, random data/number generation is well known in the art. The examiner takes OFFICIAL NOTICE of this fact.

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It would have been obvious to one of the ordinary skill in the art at the time of the invention to have modified Wilcock et al and Rothmuller et al's method for designating/choosing a day, such that the day that is chosen using a random data/day generation, as well known in the art. The combination would have allowed a user of Wilcock et al's system to have automatically selected a day, for image selection/search. With regards to claim 25, which depends on claim 14, the combination of Wilcock et al and Rothmuller et al teaches *providing a user interface to select a date component of a displayed region*, as similarly explained in the rejection for claim 15. Additionally, as explained in the rejection for claim 15, selecting a date component, via a time line. This time line, as further explained by Rothmuller et al, is used to "indicate a time period that can be used to search for matching objects in a database", and thus, a time period, is a *subregion of time in a displayed region* (Fig 1, reference number 100: a subregion display of days, reference number 250: a subregion display of months and days)). The displayed region in Fig 1, reference 100, shows *images having metadata corresponding to the selected subregion*.

With regards to claim 26, which depends on claim 25, the combination of Wilcock et al and Rothmuller et al teaches *the step of displaying, as part of the user interface to select a subregion, an indication of the subregions for which there are stored images having metadata corresponding to an indicated subregion*, as similarly explained in the rejection for claim 25 (since the time line used indicates further subregions that have metadata corresponding to an indicated subregion), and is rejected under similar rationale.

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With regards to claim 27, which depends on claim 25, the combination of Wilcock et al and Rothmuller et al teaches *providing a user interface to select a sub-subregion of the selected subregion, the interface comprising an indication of the sub-subregions for which there are stored images having metadata corresponding to an indicated sub-subregion*, as similarly explained in the rejection for claim 19 (since the month of the calendar is indicative of a sub region, and there are marked days that indicate of particular sub-subregions for which there are stored images having metadata corresponding to an indicated sub-region), and is rejected under similar rationale.

With regards to claim 29, which depends on claim 14, Wilcock et al and Rothmuller et al teaches *at least one date scheme, comprises, at least two subcategories* (one being a year of image creation, and the other being a month of image creation), as explained in the rejection for claim 15, and is rejected under the same rationale. Additionally, the date scheme that Rothmuller teaches further includes each *image [being] indexed by each applicable subcategory* (paragraph 0025: whereas, each image stored, is indexed according to tag metadata).

With regards to claim 30, which depends on claim 29, Wilcock et al and Rothmuller et al similarly teach *wherein the at least one scheme comprises image date, and wherein the subcategories comprise year of image creation and month of image creation*, as similarly explained in the rejection for claim 29, and is rejected under similar rationale.

With regards to claim 31, which depends on claim 29, Wilcock et al and Rothmuller et al similarly teach the each image being indexed by an applicable subcategory, as explained in the rejection for claim 29. Rothmuller et al further teaches the

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subcategories to include a scheme comprising *one or more image subjects* (paragraph 0025: whereas, an image subject includes the subject of a photo/image), *and wherein the subcategories comprises individual subjects of at least one multisubject image* (paragraph 0025: whereas an image subject further includes individual subjects, such as place or event where the photo was taken.)

With regards to claim 32, which depends on claim 29, Wilcock et al and Rothmuller et al similarly teaches at least one scheme comprises image location (paragraph 0025: whereas, image location includes the city name), and wherein the subcategories comprises a region and a subregion (paragraph 0030: whereas, the image location scheme, can further include subcategories of region (country) and subregion (city) as explained in paragraph 0037).

With regards to claim 34, which depends on claim 14, Rothmuller et al teaches *displaying information about images, and receiving a selection*, as explained in the rejection for claim 15, and is rejected under similar rationale. Rothmuller et al further teaches the displaying of information about images includes *displaying information about images in a first image group* (Fig 1, paragraph 0030: whereas, information about images in a best match image group (best match based on tag search criteria including date and subject) are displayed), *displaying information about additional image groups of which the first image is also a member* (Fig 1, paragraph 0030: whereas, the first image group is a member of a match/result set, and the second image group is also a member of a match/result set, and the information of the additional image groups are displayed in different background color or pattern), *and displaying upon selection from*

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*the additional image groups of a second image group, information about images in the second image group* (Fig 2: whereas, upon selection of an image group (such as a close match image group) in the image area 100 of Fig 1, additional information about the images are displayed). Additionally Rothmuller et al further teaches the receiving of a selection to include *receiving a selection of a first image from the first group* (Fig 1: whereas, an image is selected through the image area, and displayed in detail in Fig 2), *and receiving a selection of a second image group from the additional image groups* (Fig 1: whereas, the image is selected from a second group (such as a close match group) from the image area, and is displayed ).

With regards to claim 35, which depends on claim 34, Rothmuller et al teaches:

- *One of the schemes is one or more image subjects, as similarly explained in the rejection fro claim 31, and is rejected under similar rationale.*
- *The first image has associated metadata categorizing the image according to multiple subjects of the image, as similarly explained in the rejection for claim 31, and is rejected under similar rationale.*
- *The first image group comprises other images having metadata corresponding to one of the multiple subjects* (paragraph 0038: whereas, the first image group / "best match" group comprises other images having metadata corresponding to one of the multiple subjects/tags).
- *The second image group comprises images having metadata corresponding to another of the multiple subjects* (paragraph 0038: whereas, the second

image group , such as the “close match” group comprises images having metadata corresponding to another of the multiple subjects)

With regards to claim 36, which depends on claim 14, the combination of Wilcock and Rothmuller et al teach:

*wherein one of the schemes comprises image date (as similarly explained in the rejection for claim 15, and is rejected under similar rationale) and one of the schemes comprises one or more image subjects (as similarly explained in the rejection for claim 31, and is rejected under similar rationale), and wherein the processor is further configured to perform steps comprising: providing a user interface to select at least one date component comprising a year, a month or a day (as similarly explained in the rejection for claim 15, and is rejected under similar rationale), displaying information regarding images in a date-based group, each image in the date-based group having metadata corresponding to the selected date component (whereas, when a month is selected, information about the images corresponding to the month are displayed, as similarly explained in the rejection for claim 18, is rejected under similar rationale), receiving a selection of an image in the date-based group (as similarly explained in the rejection for claim 34, and is rejected under similar rationale), displaying information about first and second subject-based groups (as similarly explained in the rejection for claim 34, and is rejected under similar rationale), the first subject-based group containing images having metadata corresponding to a first subject of the selected image (as similarly explained in the rejection for claim 35, and is rejected under similar rationale), and the second subject-based group containing images having metadata*



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*corresponding to a second subject of the selected image* (as similarly explained in the rejection for claim 35, and is rejected under similar rationale), *receiving a selection of the first subject-based group* (as similarly explained in the rejection for claim 34, and is rejected under similar rationale), *and displaying information regarding images in the first subject-based group* (as similarly explained in the rejection for claim 34, and is rejected under similar rationale).

With regards to claim 37, which depends on claim 14, Rothmuller et al teaches displaying information about images, as similarly explained in the rejection for claim 15. Additionally, Rothmuller et al further teaches the displaying of information about images further includes only displaying *stored images for multiple users, wherein the images are organized by user*. whereas, as explained in paragraph 0020, when a sharing profile is implemented such that pictures can only be shared between multiple users, when they certain user metadata conditions are satisfied).

With regards to claim 48, for a machine-readable medium performing a method similar to the method performed by the server of claim 14, is rejected under similar rationale.

With regards to claim 49, which depends on claim 48, for a machine-readable medium performing a method similar to the method performed by the server of claim 15, is rejected under similar rationale.

With regards to claim 50, which depends on claim 49, for a machine-readable medium performing a method similar to the method performed by the server of claim 21, is rejected under similar rationale.

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With regards to claim 51, which depends on claim 48, for a machine-readable medium performing a method similar to the method performed by the server of claim 25, is rejected under similar rationale.

With regards to claim 52, which depends on claim 48, for a machine-readable medium performing a method similar to the method performed by the server of claim 36, is rejected under similar rationale.

8. Claims 24, and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wilcock et al (US Application: US 2001/0015756 A1, published: Aug. 23, 2001, filed: Feb. 20, 2001) and Rothmuller et al (US Application: US 2003/0033296 A1, published: Feb. 13, 2003, filed: Jul. 17, 2002), in further view of Takahashi et al (US Patent: 5,537,528, issued: Jul. 16, 1996, filed: Feb. 16, 1993).

With regards to claim 24, which depends on claim 22, Wilcock et al and Rothmuller et al teaches choosing /selecting a day in which there are images, as similarly explained in the rejection for claim 19, and is rejected under similar rationale. However, Wilcock et al and Rothmuller et al does choosing the first day in a numerically ordered series of days. Takahashi et al teaches choosing images in chronological order (column 4, lines 33-47). It would have been obvious to one of the ordinary skill in the art at the time of the invention to have modified Wilcock et al and Rothmuller et al's day selection, such that the day is chosen in chronological order (thus choosing a first day among an ordered series of days), as taught by Takahashi et al. The combination would have allowed Wilcock et al to have "enabled the user to select and rearrange scenes" (column 4, lines 6-10).

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With regards to claim 28, which depends on claim 14, Wilcock et al and Rothmuller et al teach *grouping, upon designation of stored images by a user, the designated images into a user defined image folder*, as similarly explained in the rejection for claim 14, and is rejected under similar rationale. However, Wilcock et al and Rothmuller et al do not expressly teach *grouping, upon designation of stored images by a user, the designated images into a user-defined image folder, and grouping, upon designation of one or more image folders by a user, the designated folders into a higher level folder*.

However, Takahashi et al teaches *grouping, upon designation of stored images by a user, the designated images into a user-defined image node, and grouping, upon designation of one or more image nodes by a user, the designated nodes into a higher level node* (Fig 1a, Fig 1b: whereas, scenes are grouped upon designation of one or more nodes by a user, the designated nodes into a higher level node).

It would have been obvious to one of the ordinary skill in the art at the time of the invention to have modified Wilcock et al and Rothmuller et al's image folder storage system, such that the images are grouped into folders using a hierarchical grouping technique taught by Takahashi et al. The combination would have allowed Wilcock to have implemented image/scene "information indicative of a hierarchical relationship of ... scenes" (Takahashi et al, claim 3).

9. Claim 33 is rejected under 35 U.S.C. 103(a) as being unpatentable over Wilcock et al (US Application: US 2001/0015756 A1, published: Aug. 23, 2001, filed: Feb. 20, 2001) and Rothmuller et al (US Application: US 2003/0033296 A1, published: Feb. 13,

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2003, filed: Jul. 17, 2002), in further view of Wang et al (US Patent: 5,802,361, issued: Sep. 1, 1998, filed: Sep. 30, 1994)

With regards to claim 33, which depends on claim 14, Wilcock et al and Rothmuller et al teach *selecting an image*, as similarly explained in the rejection for claim

However, Wilcock et al and Rothmuller et al do not expressly teach expressly teach *identifying, after selection of an image by a user, other images having metadata in common with the selected image, wherein the common metadata is metadata other than the metadata utilized to initially search for the selected image.*

Wang et al teaches *identifying, after selection of an image by a user, other images having metadata in common with the selected image, wherein the common metadata is metadata other than the metadata utilized to initially search for the selected image*

(column 27, lines 1-10: whereas, the user selects an image, metadata/attributes of other images having metadata/attributes in common with the selected image(s), are identified).

It would have been obvious to one of the ordinary skill in the art at the time of the invention to have modified Wilcock et al, Rothmuller et al's image selection system, to have further included the ability to identify other images having metadata in common with one or more selected images, as taught by Wang et al. The combination would have allowed Wilcock et al to have "retrieved images according to their similarity measures" (Wang et al, Abstract).

10. Claim 53 is rejected under 35 U.S.C. 103(a) as being unpatentable over Wilcock et al (US Application: US 2001/0015756 A1, published: Aug. 23, 2001, filed: Feb. 20,

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2001) and Rothmuller et al (US Application: US 2003/0033296 A1, published: Feb. 13, 2003, filed: Jul. 17, 2002), and Stubler et al (US Application: US 2002/0188602 A1, published: Dec. 12, 2002, filed: May. 7, 2001), in further view of Wang et al (US Patent: 5,802,361, issued: Sep. 1, 1998, filed: Sep. 30, 1994)

With regards to claim 53, Wilcock et al teaches

a wireless mobile device, including:

- *A digital camera, a user interface, a communication interface with a wireless communication network, and a processor configured to perform steps comprising: generating image files for images created with the digital camera, as similarly explained in the rejection for claim 1, and is rejected under similar rationale.*
- *Obtaining location data from a base station for the wireless network, as similarly explained in the rejection for claim 1, and is rejected under similar rationale.*
- *Assigning metadata to each image file contemporaneously with generation of each image, the metadata categorizing each image according to a first scheme comprising date of image creation, as similarly explained in the rejection for claim 1, and is rejected under similar rationale.*
- *... according to a second scheme comprising multiple subjects shown in an image, as similarly explained in the rejection for claim 7, and is rejected under similar rationale.*
- *... according to a third scheme comprising location of image creation, as similarly explained in the rejection for claim 1, and is rejected under similar rationale*

- ... and transmitting the image files and assigned metadata, via the wireless communication network, for storage at a remote location such that the image files may subsequently be searched based upon the metadata, as similarly explained in the rejection for claim 1, and is rejected under similar rationale.
- and a server for storing image data comprising: a memory, a communications interface coupled to the wireless communication network, and a processor configured to perform steps comprising: storing images generated by the wireless mobile device and transmitted through the wireless communication network to the server, said storing comprising storing the images in a database in the memory, the database having at least one virtual folder corresponding to each metadata scheme, and wherein each image has at least one entry in each of the at least one folders, as similarly explained in the rejection for claim 14, and is rejected under similar rationale.

Wilcock et al and Rothmuller et al teach:

- ... providing a user interface to select a year, displaying, as part of the user interface to select a year, an indication of the years for which there are stored images having metadata indicating creation of an image in an indicated year, as similarly explained in the rejection for claim 17, and is rejected under similar rationale.
- ... providing a user interface to select a month of the selected year, displaying, as part of the user interface to select a month, an indication of the months for which there are stored images having metadata indicating creation of an image in

*an indicated month*, as similarly explained in the rejection for claim 18, and is rejected under similar rationale.

- *... providing a user interface to select a day of the selected month, displaying, as part of the user interface to select a day, an indication of the days for which there are stored images having metadata indicating creation of an image on an indicated day*, as similarly explained in the rejection for claim 19, and is rejected under similar rationale.
- *... displaying, upon selection of a day, information regarding images created on the selected day*, as similarly explained in the rejection for claim 20, and is rejected under similar rationale.
- *... providing a user interface to select a subregion of a displayed region*, as similarly explained in the rejection for claim 25, and is rejected under similar rationale.
- *... displaying, as part of the user interface to select a subregion, an indication of the subregions for which there are stored images having metadata indicating creation of an image in an indicated subregion*, as similarly explained in the rejection for claim 26, and is rejected under similar rationale.
- *... displaying, upon selection of a subregion, information regarding images created in the selected subregion*, as similarly explained in the rejection for claim 25, and is rejected under similar rationale.

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However, Wilcock et al and Rothmuller et al do not expressly teach *generating a prompt for a user to accept or modify a suggested subject for an image based upon data in another application program being executed by the processor.*

Stubler et al teaches *generating a prompt for a user to accept or modify a suggested subject for an image based upon data in another application program being executed by the processor*, as similarly explained in the rejection for claim 11, and is rejected under similar rationale.

It would have been obvious to one of the ordinary skill in the art at the time of the invention to have modified Wilcock et al's mobile/camera device, such that it would further include the subject detection and prompting and detecting a subject that is taught by Stubler et al's computing device. The combination of Wilcock et al, Rothmuller et al, and Stubler et al would have allowed Wilcock et al to have "automatically selected one or more stored images having metadata similar to the acquired image ... and ... generating one or more captions or labels for the acquired image" (Stubler et al, paragraph 0009).

However, the combination of Wilcock et al, Rothmuller et al, and Stubler et al do not expressly teach *identifying, after selection of an image by a user, other images having metadata in common with the selected image, wherein the common metadata is metadata other than the metadata utilized to initially search for the selected image.*

Wang et al teaches *identifying, after selection of an image by a user, other images having metadata in common with the selected image, wherein the common metadata is metadata other than the metadata utilized to initially search for the selected image*



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(column 27, lines 1-10: whereas, the user selects an image, metadata/attributes of other images having metadata/attributes in common with the selected image(s), are identified).

It would have been obvious to one of the ordinary skill in the art at the time of the invention to have modified Wilcock et al, Rothmuller et al, and Stubler et al's image selection system, to have further included the ability to identify other images having metadata in common with one or more selected images, as taught by Wang et al. The combination would have allowed Wilcock et al to have "retrieved images according to their similarity measures" (Wang et al, Abstract).

### ***Conclusion***

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Kahn et al (US Application: US 2004/0004663 A1): This reference teaches a wireless communications interface, obtaining location data from a base station for a wireless network, and assigning metadata to each image file.
- Svendsen et al (US Patent: 6,954,543 B2): This reference teaches a remote/centralized image file metadata service.
- Davis et al (US Patent: 7,010,144 B2): This reference teaches image metadata, including date, location, and mobile/wireless devices.
- Morris et al (US Application: US 2003/0126212 A1): This reference teaches a centralized image metadata repository, and metadata searching.

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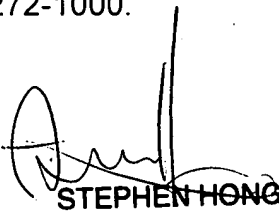
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Wilson Tsui whose telephone number is (571)272-7596. The examiner can normally be reached on Monday - Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen Hong can be reached on (571) 272-4124. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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W.T. 12/8/06

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December 8, 2006

  
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